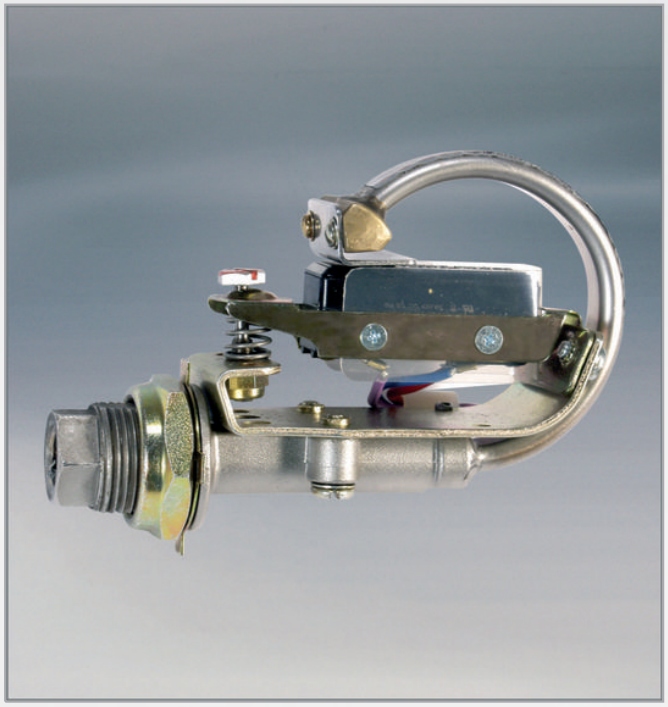
# Bourdon Tube Pressure Switches

## Type B1S/B2S

**Mechanical single/dual pressure switch**
**Repeatability ±1.0 % at constant temperature**



## Features

Bourdon tube pressure switch
All welded parts wetted.
Direct acting, no friction, high accuracy

## Adjustment ranges

4.8 ... 950 bar

## Applications

Pump control,
Die-casting machines,
Press control,
Power plants,
Alarm functions

## Technical Data

| | |
|---|---|
| **Wetted parts:**<br>Process connection:<br><br>Bourdon tube: | <br>Stainless steel 1.4401<br><br>Stainless steel 1.4401 |
| **Repeatability:** | ±1 % at constant temperature |
| **Switching rate:** | max. 20/min |
| **Temperature range:** | -40 °C... +75 °C |
| **Protection class:** | IP00 |
| **Housing:** | Without housing for installation in control panels: |
| **Process connection:** | 1/4" NPT female thread except ranges marked with *). These switches have proof pressures above 500 bar and are provided with high pressure thread with adapter "G1/4 female". |
| **Electrical connection:** | Lead wire PVC 1.5 mm², length appr. 450 mm |

| | |
|---|---|
| **Electrical ratings and hysteresis:** | A large variety of micro switches offers different electrical ratings and hysteresis for many applications. |
| **Weight:** | B1S-...: approx. 0.6 kg<br>B2S-...: approx. 0.7 kg |
| **Set point adjustment:** | Turn the adjustment screw clockwise to decrease the set point |
| **Intrinsically safe:** | The switches are designed for intrinsically safe applications. Please add "Exi" to your ordering details when placing an order. To comply with the intrinsically safe approval following max. ratings must not be exceeded:<br>Umax = 28 V<br>Imax = 50 mA |
| **Approval:** | --- |

## Connection Chart

| Pressure range code | Adjustment range [bar] | | Max. operating pressure [bar] | Test pressure [bar] | Max. hysteresis of switch types in bar (end of range) | |
|---|---|---|---|---|---|---|
| | Increasing press. | Decreasing press. | | (short term) | H, GH [bar] | M, GM [bar] |
| 12SS | 4.8 ... 82 | 3.4 ... 81 | 90 | 100 | 0.96 | 1.86 |
| 32SS | 13.7 ... 220 | 11.0 ... 217 | 250 | 280 | 2.68 | 5.44 |
| 48SS | 22.4 ... 330 | 16.5 ... 325 | 370 | 415 | 2.75 | 5.90 |
| 65SS* | 30.3 ... 448 | 22.5 ... 440 | 500 | 560 | 3.58 | 7.92 |
| 120SS* | 79.3 ... 827 | 41.4 ... 790 | 850 | 1035 | 16.90 | 37.90 |
| 180SS* | 79.3 ... 950 | 41.4 ... 950 | 999 | 1380 | 16.90 | 37.90 |

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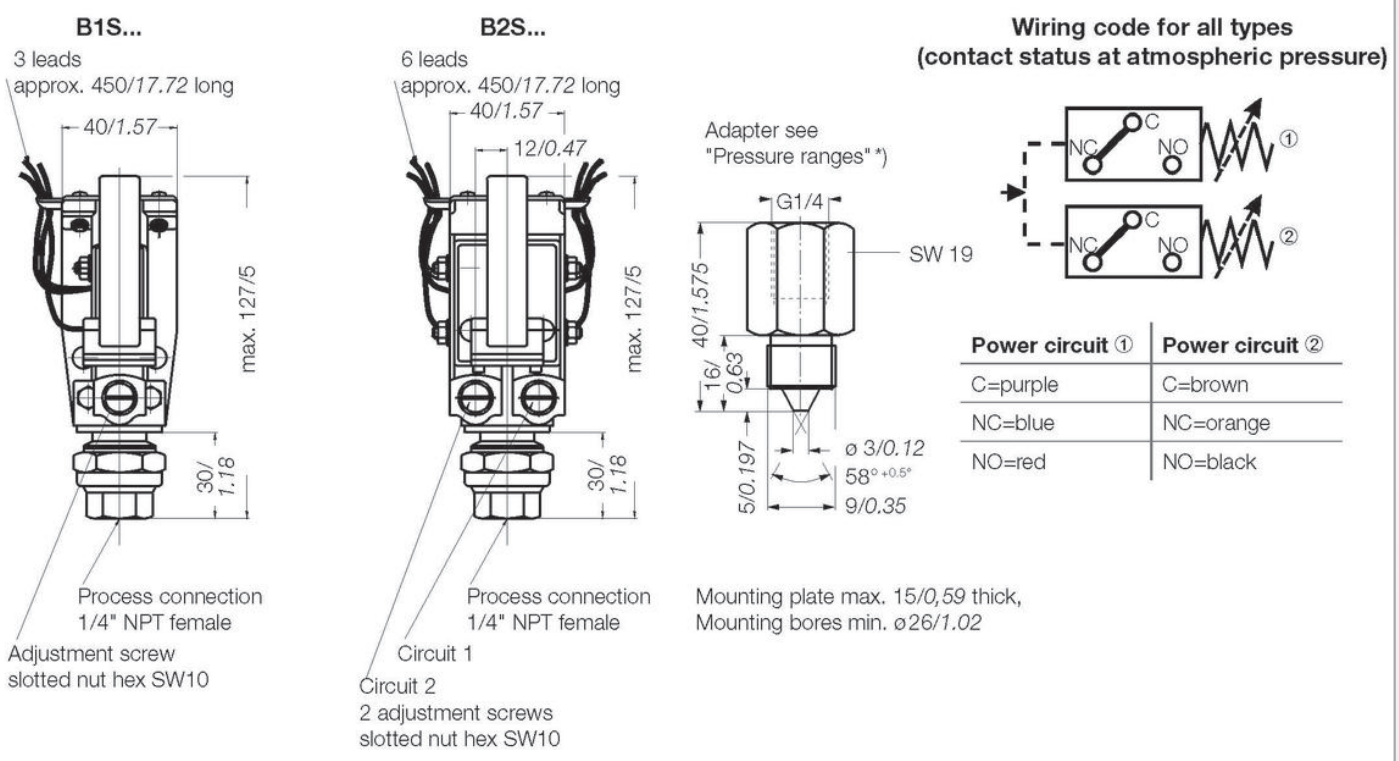
## Dimensions (mm / *inch*)




## Electrical Ratings

| Micro switch | Special features | Volt AC 50/60 Hz | Ind. load A | Res. load A | Volt DC | Ind. load A | Res. load A | Comments |
|---|---|---|---|---|---|---|---|---|
| H | Micro switch with silver contacts | 125<br>250<br>480* | 10<br>10<br>3 | 10<br>10<br>3 | 6<br>to<br>24 | 0.50 | 0.5 | Small hysteresis;<br>High AC-/<br>low DC-load |
| M | Micro switch with silver contacts | 125<br>250<br>480* | 10<br>10<br>3 | 10<br>10<br>3 | 12<br>24<br>250* | 5.00<br>1.00<br>0.25 | 15.0<br>2.0<br>0.4 | Medium hysteresis;<br>High AC- and<br>DC-loads |
| GH | Micro switch with gold-plated contacts for low voltage and/or low current | 125 | 1 | 1 | 24 | 1.00 | 1.00 | Small hysteresis |
| GM | | 30 | 0.1 | 0.1 | 30 | 0.10 | 0.1 | Medium hysteresis |

* on request

## Order Code

**Example for order number**

| Type | | | Micro switch | Pressure range code |
|---|---|---|---|---|
| B1S | or | B2S | - H | 48SS |

**Your order number**

| Type | | | Micro switch | Pressure range code |
|---|---|---|---|---|
| | or | | - | |